

### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan Governor

Lori F. Kaplan Commissioner

March 4, 2004

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Kimball Electronics Group / 037-18493-00100

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

# Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) calendar days from the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3)the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- the name and address of the person making the request; (1)
- (2) the interest of the person making the request:
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

> Enclosures FNPER-AM.dot 9/16/03





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March 4, 2004

Mr. Garry W. Smith Kimball Electronics Group Kimball Industrial Complex 1038 East 15<sup>th</sup> Street Jasper, Indiana 47549

Dear Mr. Garry Smith:

Re: Exempt Construction Status 037-18493-00100

The application from Kimball Electronics Group (a part of Kimball Industrial Complex, received on December 12, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission units to be located at 1038 East 15<sup>th</sup> Street, Jasper, Indiana, are classified as exempt from air pollution permit requirements:

One (1) EPS Line consisting of the following emission units and used to manufacture circuit board components for electronic power steering systems for automobiles:

- (a) Two (2) Vitronics-Soltec Selective Solder Units, installed in 2004, each with a maximum throughput capacity of 0.41 pounds of flux and 1.59 pounds of solder per hour.
- (b) Two (2) Model PVA 2000 Conformal Coating Units, installed in 2004, each with a maximum application rate of 0.104 gallons per hour.

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
  - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuos opacity monitor in a six (6) hour period.
- (b) This existing source submitted their Title V application (037-7356-00100) on December 4, 1996. The new emission units will be incorporated into the Title V prior to issuance.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

#### **ERG/AAB**

cc: File - Dubois County

Dubois County Health Department Air Compliance - Gene Kelso Permit Tracking - Sara Cloe

Technical Support and Modeling - Michele Boner

Compliance Branch

Title V Reviewer - Melissa Groch Title V File - T037-7356-00100

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for an Exemption

#### **Source Background and Description**

Source Name: Kimball Industrial Complex

Source Location: 1038 East 15<sup>th</sup> Street, Jasper, Indiana 47549

County: Dubois

SIC Code: 2511, 3479, 2541, 2542

Operation Permit No.: 037-7356-00100

Operation Permit Issuance Date: Not issued yet

Exemption No.: 037-18493-00100
Permit Reviewer: ERG/AAB

The Office of Air Quality (OAQ) has reviewed an application from Kimball Electronics Group (a part of Kimball Industrial Complex) relating to the following changes:

- (1) Kimball plans to relocate the Systron Donner Process to a different location within the same plant. Since the Systron Donner Process currently shares an electric oven with another process line not being relocated, an additional electric oven will be installed on the Systron Donner Process line. This change will not result in an increase in the emissions from either process line or increase the number of parts manufactured by each line because the maximum throughput for each line is limited by the application rate, not by the oven capacity. There are no emissions from the electric oven.
- (2) Kimball plans to reorganize the EPS Line and add two (2) T630 silicon dispensers, two (2) Vitronics-Soltec Selective Solder units, one (1) J-Former Wire Crimper, and two (2) electric ovens. The new equipment will increase the production capacity of the EPS Line, but will not affect any other processes at this source. There are no emissions from the silicon dispensers, J-Former Wire Crimper or electric ovens.

#### New Emission Units and Pollution Control Equipment Receiving Prior Approval

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-7-5(16):

One (1) EPS Line consisting of the following emission units and used to manufacture circuit board components for electronic power steering systems for automobiles:

- (a) Two (2) Vitronics-Soltec Selective Solder Units, installed in 2004, each with a maximum throughput capacity of 0.41 pounds of flux and 1.59 pounds of solder per hour.
- (b) Two (2) Model PVA 2000 Conformal Coating Units, installed in 2004, each with a maximum application rate of 0.104 gallons per hour.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Exemption be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 12, 2003, with additional information received on February 2, 2004.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 and 2).

#### Potential To Emit of New Emission Units Before Control

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.

Pollutant	Potential To Emit (tons/year)		
PM	negligible		
PM10	negligible		
SO <sub>2</sub>	0.00		
VOC	3.68		
CO	0.00		
NO <sub>x</sub>	0.00		

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)			
Methanol	0.18			
TOTAL	0.18			

The potential to emit (as defined in 326 IAC 2-1.1-1(16) of all criteria pollutants is less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the EPS Line is subject to the provisions of 326 IAC 2-1.1-3. An exemption shall be issued.

#### **County Attainment Status**

The source is located in Dubois County.

Pollutant	Status		
PM10	Attainment		
SO <sub>2</sub>	Attainment		

Page 3 of 5 E037-18493-00100

Kimball Industrial Complex Jasper, Indiana

Permit Reviewer: ERG/AAB

Pollutant	Status		
$NO_2$	Attainment		
Ozone	Attainment		
CO	Attainment		
Lead	Attainment		

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Dubois County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
  Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2
  and since there are no applicable New Source Performance Standards that were in effect
  on August 7, 1980, the fugitive emissions are not counted toward determination of PSD
  and Emission Offset applicability.

#### **Part 70 Permit Conditions**

This existing source submitted their Part 70 (T037-7356-00100) application on December 4, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

#### **Federal Rule Applicability**

- (a) This modification does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for all criteria pollutants:
  - (1) With the potential to emit before controls equal to or greater than the major source threshold for all criteria pollutants,
  - (2) That is subject to an emission limitation or standard for all criteria pollutants, and.
  - (3) Uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR part 64, Compliance Assurance Monitoring, are not applicable.

- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this modification.
- (d) The Conformal Coaters are not subject to the requirements of 40 CFR 63, Subpart MMMM
   National Emission Standards for Hazardous Air Pollutants for Surface Coating of

Permit Reviewer: ERG/AAB

Miscellaneous Metal Parts and Products because they will be used to apply coatings to plastic circuit boards. No metal parts are coated.

#### State Rule Applicability - EPS Line

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

This modification to an existing major source is not subject to the requirements of 326 IAC 2-2 because the increase in VOC emissions is less than 40 tons per year. The future potential to emit for the modified EPS Line is 3.68 tons of VOC per year. No data on past actual emissions from the existing EPS Line were provided by the source. However, the increase in VOC emissions resulting from this modification would be less than 3.68 tons per year.

	PM	PM <sub>10</sub>	VOC	SO <sub>2</sub>	NO <sub>x</sub>	СО	
	(in tons per year)						
Future PTE for Modified EPS Line	0.00	0.00	3.68	0.00	0.00	0.00	
Past Actual Emissions from EPS Line	0.00	0.00	No data provided	0.00	0.00	0.00	
Increase in Emissions	0.00	0.00	Less than 3.68	0.00	0.00	0.00	
PSD Thresholds	25	15	40	40	40	100	

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 26 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The EPS Line has a potential to emit less than ten (10) tons per year of any single HAP and less than twenty-five (25) tons per year of combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

Although constructed after the January 1, 1980 applicability date, the EPS Line is not subject to the requirements of 326 IAC 8-1-6 because the potential VOC emissions are less than 25 tons per year.

#### 326 IAC 6-3 (Particulate Emissions from Manufacturing Operations)

The EPS Line is not subject to the requirements of 326 IAC 6-3 because this process does not emit particulate emissions.

#### Conclusion

Kimball Industrial Complex Page 5 of 5
Jasper, Indiana E037-18493-00100

Permit Reviewer: ERG/AAB

The construction of the EPS Line shall be subject to the conditions of the attached proposed Exemption 037-18493-00100.

# Appendix A: Emissions Calculations VOC and HAP Emissions from Conformal Coating Units

Company Name: Kimball Industrial Complex

Address: 1038 East 15th Street, Jasper, IN 46206

 Permit No.:
 037-18493

 Plt ID:
 037-00100

 Reviewer:
 ERG/AAB

Date: February 2, 2004

Material	Density (lb/Gal)	Weight % VOC	Weight % HAP*	Usage (gal/hr)	PTE VOC (tons/yr)	PTE HAP (tons/yr)
Dow Corning 3-1953	8.09	1.00%	1.00%	0.104	0.037	0.037
PTE Total for Two Conformal Coating Units					0.074	0.074

<sup>\*</sup> VOC are listed on the MSDS as 1% methanol.

#### **METHODOLOGY**

PTE (tons/yr) for each conformal coater = Usage (gal/hr) x 8760 (hr/yr) x Density (lb/gal) x Wt % Pollutant x 1 ton/2000 lbs

# Appendix A: Emissions Calculations VOC and HAP Emissions from Solder Units

Company Name: Kimball Industrial Complex

Address: 1038 East 15th Street, Jasper, IN 46206

**Permit No.**: 037-18493 **Plt ID**: 037-00100

Reviewer: ERG/AAB

Date: February 2, 2004

Per Machine	Machine Capacity (lbs/hr)	Total Usage (lbs/yr)	Wt. % VOC **	PTE VOC (tons/yr)	Wt. % HAP***	PTE HAP (tons/yr)
951 Low Residue Flux**	0.412	3,609	100%	1.80	3.00%	0.054
Kester Solder*	1.59	13,928	0	0.00	0	0.00
PTE Total for Two Vitronic-Soltec Selective Solder Units 3.61						0.11

## Methodology:

PTE (tons/yr) for each machine = Max. capacity (lbs/hr) x 8760 (hrs/yr) x Pollutant Content (Wt. %) x 1ton/2000lbs

<sup>\*</sup> Material contains no HAPs and no VOC.

<sup>\*\*</sup> Assumes 100% volatile by weight. Actual VOC content is 98% by volume.

<sup>\*\*\*</sup> The Flux used for this process contains less than 3% by weight of methanol.